

Title (en)
CHARGE/DISCHARGE TEST SYSTEM AND CHARGE/DISCHARGE TEST METHOD

Title (de)
LADE-/ENTLADETESTSYSTEM UND LADE-/ENTLADETESTVERFAHREN

Title (fr)
SYSTÈME DE TEST DE CHARGE/DÉCHARGE ET PROCÉDÉ DE TEST DE CHARGE/DÉCHARGE

Publication
EP 4202463 A4 20240417 (EN)

Application
EP 21880518 A 20211013

Priority
• KR 20200132068 A 20201013
• KR 2021014149 W 20211013

Abstract (en)
[origin: EP4202463A1] Provided is a charging/discharging test system and method. The charging/discharging test system includes a charging/discharging test device connectable to a test target; and a controller to output a first control signal commanding to start a charging/discharging test for a first battery provided as the test target. The charging/discharging test device repeatedly performs a first charge/discharge cycle until a cumulative capacity of the first battery by the first charge/discharge cycle reaches a reference capacity in response to the first control signal. The first charge/discharge cycle equals first constant current charging until a first end-of-charge voltage is reached, a first rest period, first constant current discharging until a first end-of-discharge voltage is reached and a second rest period in a sequential order, at a first temperature condition. Each time the first charge/discharge cycle is performed, the controller adds the cumulative capacity and a voltage drop of the first battery over the first rest period to a first test dataset associated with the first charge/discharge cycle.

IPC 8 full level
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CPC (source: EP KR US)
G01R 31/3646 (2019.01 - KR); **G01R 31/3648** (2013.01 - KR); **G01R 31/374** (2019.01 - US); **G01R 31/382** (2019.01 - KR); **G01R 31/3835** (2019.01 - US); **G01R 31/386** (2019.01 - EP); **G01R 31/392** (2019.01 - EP KR US); **H02J 7/0013** (2013.01 - US); **H02J 7/0047** (2013.01 - EP KR); **H02J 7/0048** (2020.01 - EP US); **H02J 7/005** (2020.01 - EP); **H02J 7/00712** (2020.01 - KR); **H02J 7/007182** (2020.01 - US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)
• [I] US 5160880 A 19921103 - PALANISAMY THIRUMALAI G [US]
• [A] US 2020217898 A1 20200709 - LEE YOUNG-KUG [KR], et al
• [A] JP 2001102097 A 20010413 - NIPPON TELEGRAPH & TELEPHONE
• See also references of WO 2022080871A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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EP 4202463 A1 20230628; EP 4202463 A4 20240417; CN 115885188 A 20230331; KR 20220048782 A 20220420;
US 2023243894 A1 20230803; WO 2022080871 A1 20220421

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EP 21880518 A 20211013; CN 202180041690 A 20211013; KR 20200132068 A 20201013; KR 2021014149 W 20211013;
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